



Preliminary Ecological Appraisal and Preliminary Roost Assessment Survey

Land at Oakfields, Merthyr Vale, Merthyr Tydfil, South Glamorgan, CF48 8TA

Mr Navid Childs

Status	Issue	Name	Date
Draft	1	Chris Formaggia, BSc (Joint Hons) CBiol CEnv MCIEEM MRBS VR – Company Principal	11/04/2021
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Guidelines

This assessment has been designed to meet:

- Chartered Institute of Ecology and Environmental Management 'Guidelines for Preliminary Ecological Appraisal Second Edition, December 2017';
- Chartered Institute of Ecology and Environmental Management 'Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine, September 2018'; and
- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

In consequence of the scale and intensity of the proposed development, the low impact on ecological receptors identified through both the site survey and search of local biological records, and the passive interface with the mitigation hierarchy, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

Executive summary

Arbtech Consulting Limited was commissioned by Mr Navid Childs to undertake a Preliminary Ecological Appraisal and Preliminary Roost Assessment (PRA) of land containing a minor stables block known as Oakfields in Merthyr Vale. The survey was completed on the 5th March 2021. The aim of the survey was to complete an Extended Phase 1 Habitat Survey of the survey area (all land that will be impacted by the proposals) and to search for bats/field signs of bats and to consider the value and suitability of the structures for roosting bats. This information is analysed against a desk study.

The development proposals are for the creation of a barn and three greenhouses in the south west corner of the site. A small area along the western boundary is to be landscaped into a more formal garden area and some supplementary tree planting is planned for the rest of the site although this is not yet detailed. A planning application will be submitted to Merthyr Tydfil Borough Council.

Recommendations - This is work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent.

Ecological Factor	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations	Enhancements The Local Planning Authority has a duty to ask for enhancements under the NPPF (July 2018)
Designated sites	The site is not subject to any national or international designations. The site includes part of SINC 45 - Ynysowen/Merthyr Vale: A complex mosaic of ffridd habitats above the Afon Taf. These comprise mainly seminatural woodlands, acid grasslands, dry heathlands and bracken slopes. Other habitats include dense and scattered scrub, marshy grassland and neutral grassland. There is also a large disused quarry with associated spoil tips which have revegetated with heathland. In the north of the site is a large regraded colliery spoil tip supporting acid grassland with several species of interest.	The barn and green houses are not expected to generate any impact of significance on the integrity of the SINC site. The planting of trees could change the designated character of the SINC site.	A detailed management plan should be prepared for the SINC area under planning condition. This should set out short-, mid- and long-term management intentions for the landholding.	There is an opportunity to expand areas of acid grassland on the mosaic and in particular to encourage beds of lime-hating species such as heathers and bilberry which are present but becoming over dominated by bracken. A scheme of enhancement to be incorporated into the proposed management plan.
Notable habitats and plants	See SINC notification above	As above	As above	As above

Invasive / Non-native species	Bracken is over-dominant as a result of limited grazing pressure over a period of years	Unchecked the bracken will crowd out other mosaic habitat types of greater nature conservation value.	As above	As above
Bats	The site buildings (some stable sheds) have negligible habitat value for supporting roosting bats. Minor trees on site do not contain any potential roosting features (PRFs).	The site is likely to provide foraging for bats and no significant change is anticipated	No further surveys.	None
Birds	The site buildings do contain evidence of nesting birds. No evidence of barn owl usage was found. There is some limited potential for nesting by common and woodland bird species in existing site vegetation and the possibility of ground-nesting by species such as skylark.	The proposals are not considered likely to directly affect nesting birds. Some limited tree planting could, in time, increase nesting opportunity.	Vegetation clearance should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the buildings should be undertaken immediately prior to the commencement of works. All active nests will need to be retained until the young have fledged.	Install three Schwegler bird boxes on new barn e.g. Schwegler No 17 swift nest box Schwegler 1SP Sparrow Terrace Schwegler 1B nest boxes Schwegler 2H Robin Boxes Nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift nest boxes/nest cups should be positioned inside a building/covered area/outbuilding with open access for birds. Sparrow Terraces/nest boxes should be positioned at the eaves of the new building and can be incorporated into the fabric of the building during construction.
Reptiles	There suitable habitat on site for common reptiles.	The proposed development could result in the loss of habitat for common reptiles. Any reptiles present during the works could be injured or killed.	Reptile surveys may be required by the LPA to assess the presence/likely-absence of reptiles using the site. Refugia would be placed around the site in suitable reptile habitat and left to 'bed in' for a minimum of two weeks. Seven separate site visits, conducted in suitable	Waste materials created during the development e.g. log piles, brash, rocks etc. Can be used to create hibernacula and refugia for common reptiles. These should be positioned on the site boundaries.

			weather conditions, will be conducted to survey for reptiles. These surveys can take place in April, May and September. • Upon completion of the surveys a Mitigation and Enhancement Plan for reptiles will be prepared detailing methods to prevent harm to reptiles during the works and enhancements of the developed site. The authority might consider a destructive search/centre-out vegetation clearance under ecological supervision is adequate to protect possible reptiles on site.	
Amphibians	There are three ponds within 500m of the site but all are on the far side of the Taff valley	The proposed development will have no significant impacts on common amphibians or GCN.	No further action required.	n/a
Invertebrates	The SINC areas contain extensive anthill complexes	The proposal is not expected to generate significant harm to these features	The proposed management plan should address the preservation of these invertebrate features	To be considered
Other Terrestrial Mammals	Badgers There are no observable badger setts on site and no evidence of badger use was found.	Badgers None	Badgers No further surveys are required. However, the following recommendations are given in order to mitigate against potential harm to badgers during the development works, as the species is very mobile: • Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. • Security lighting to be directed away from the undergrowth. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.	Badgers Planting fruit-rich trees on the developed site will provide additional foraging resources for badgers.

	Water Vole No suitable habitat.	Water Vole The proposed development will have no impact on water voles.	Water Vole No further surveys.	Water Vole n/a
	Otter No suitable habitat.	Otter The proposed development will have no impact on otters.	Otter No further surveys.	Otter n/a
	Hedgehogs The site provides suitable habitat for hedgehogs.	Hedgehogs The proposed development will result in the loss of habitat for hedgehogs. Any hedgehogs present during the works could be injured or killed.	Hedgehogs No further surveys are required. However, the following recommendations are given in order to mitigate against potential harm to hedgehogs during the development works. - Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. - Security lighting to be directed away from the undergrowth. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.	Hedgehogs Gaps should be created in new boundary fences to provide commuting routes through the developed site/new garden areas of the developed site for hedgehogs. Hedgehog houses could be incorporated into the developed site positioned beneath the hedgerow boundaries/site boundaries/in shady areas of the new gardens.

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1.0 Introduction and Context

1.1 Background

Arbtech were commissioned by Navid Childs to undertake a Preliminary Ecological Appraisal (PEA) and a Preliminary Roost Assessment (PRA) at the site of Oaklands. The survey was completed on the 5th of March 2021. The aim of the survey was to complete an extended Phase 1 Habitat Survey of the survey area (all land that will be impacted by the proposals) and to consider the value and suitability of the structures for roosting bats. The PRA is informed by the Bat Conservation Trust publication, Bat Surveys for Professional Ecologists – Good Practice Guidelines (Collins, J. (Ed) 2016).

No previous reports have been produced for this site by Arbtech Consulting Ltd.

1.2 Site Context

The site is located at National Grid Reference ST 07881 98857 and has an area of approximately 2.16ha. The site consists of minor redundant stables and upland pasture.

1.3 Scope of the report

This report describes the baseline ecological conditions at the site; evaluates habitats within the survey area in the context of the wider environment; and describes the suitability of those habitats for notable or protected species. The PRA element of the survey the report provides a description of all features suitable for roosting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It identifies significant ecological impacts as a result of the development proposals; summarises the requirements for further surveys and mitigation measures, to inform subsequent mitigation proposals, achieve Planning or other statutory consent, and to comply with wildlife legislation.

To achieve this, the following steps were taken:

- The desk study area and field survey area (generally 50m from the site boundary/proposed footprint and including the ‘zone of influence’ of the scheme) have been identified
- A desk study has been carried out.

- Baseline information on the site and surrounding area has been recorded through an 'Extended Phase 1 Habitat Survey', including a Phase 1 Habitat Survey (JNCC 2010) and recording further details in relation to notable or protected habitats and species.
- The ecological features present within the survey area have been evaluated where possible (CIEEM, December 2017).
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Likely impacts on features of value, as a result of the development proposals, have been identified.
- Recommendations for further survey and assessment have been made
- Recommendations for mitigation and enhancements of the developed site have been provided based on current information.

A survey plan is presented in Appendix 1, proposed plans in Appendix 2, desk study results in Appendix 3 and a summary of relevant legislation is presented in Appendix 4.

1.4 Project Description

The development proposals are for the substantial restoration of a farmhouse and outbuildings. A planning application is being considered by Carmarthenshire County Council.

2.0 Methodology

2.1 Desk Study methodology

The desk study included a 2km radius review of statutory and non-statutory designated sites, Biodiversity Action Plan (BAP) Priority Habitats and granted EPSML records for bats held on Magic database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

Given the minor risks from the scheme to significant ecological receptors it is considered that a biological records search is unnecessary.

2.2 Site Survey methodology

The survey was undertaken by Chris Formaggia BSc (Joint Hons) CBiol CEnv MCIEEM MRBS VR on the 5th March 2021.

The methodology for the Phase 1 habitat survey is based on the best practice publication Phase 1 Habitat Survey Methodology (JNCC, 2010). All land parcels are described and mapped according to JNCC Phase 1 Habitat Classification. Where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management.

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species. The likelihood of the presence of protected species is ranked; the habitats on site are evaluated against their likelihood to provide suitable habitat for protected species.